Central Valley Drinking Water Policy

Prioritizing Drinking Water Constituents

BDPAC Drinking Water Subcommittee

January 28, 2005

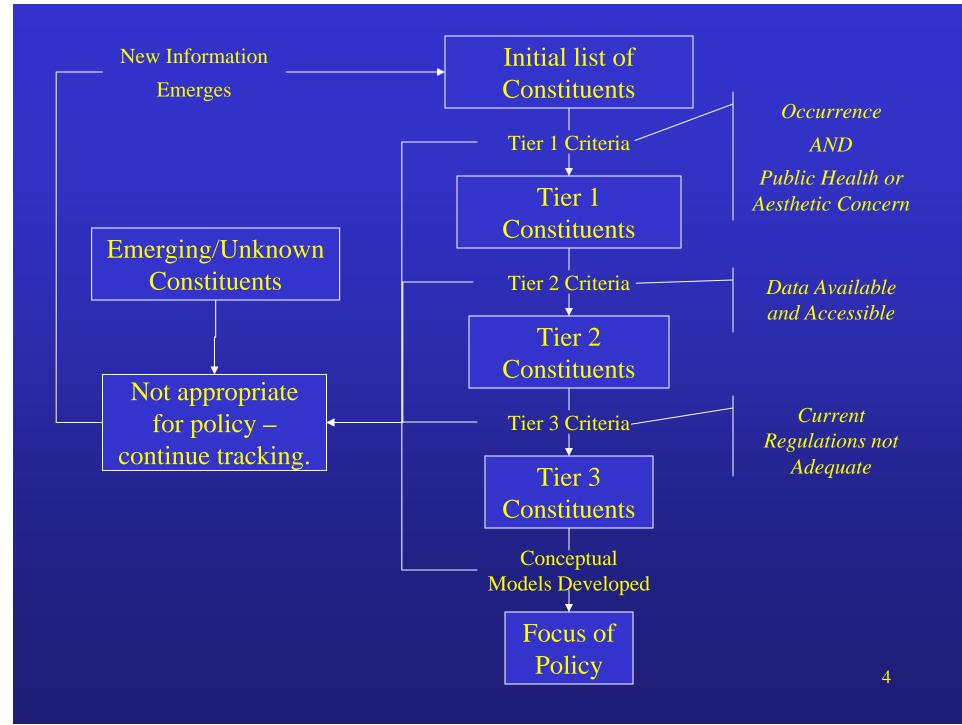
Karen Larsen, CVRWQCB

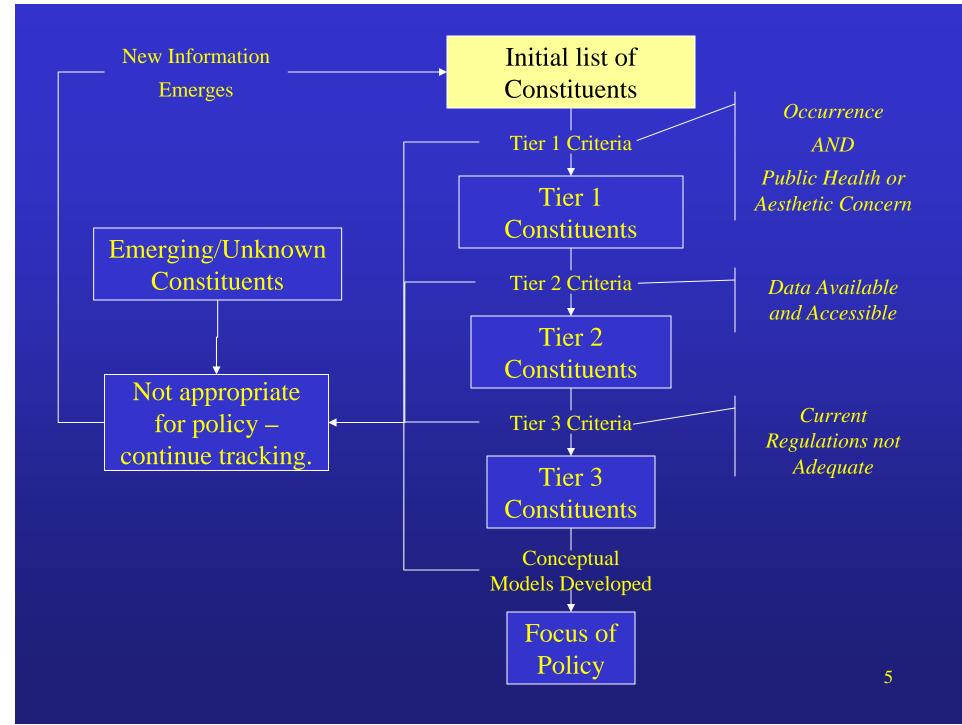
Presentation Overview

- Purpose of prioritizing constituents
- Prioritization process
- Current activities

Purpose of Prioritizing Constituents

- Resource limitations
- Information constraints
- Focus initial effort with eye on future





Initial List of Constituents (1)

- Conventional
 - Cyanide
 - Temperature
 - Dissolved Oxygen
 - pH
 - Hardness
 - Salinity
 - Percent Sand/Silt/Clay
 - Turbidity/TSS

- Dissolved Minerals
 - Total Dissolved Solids
 - Chloride
 - Conductivity
- Taste/Odor Producing Compounds
 - MIB
 - Geosmin
- Algal Toxins

Initial List of Constituents (2)

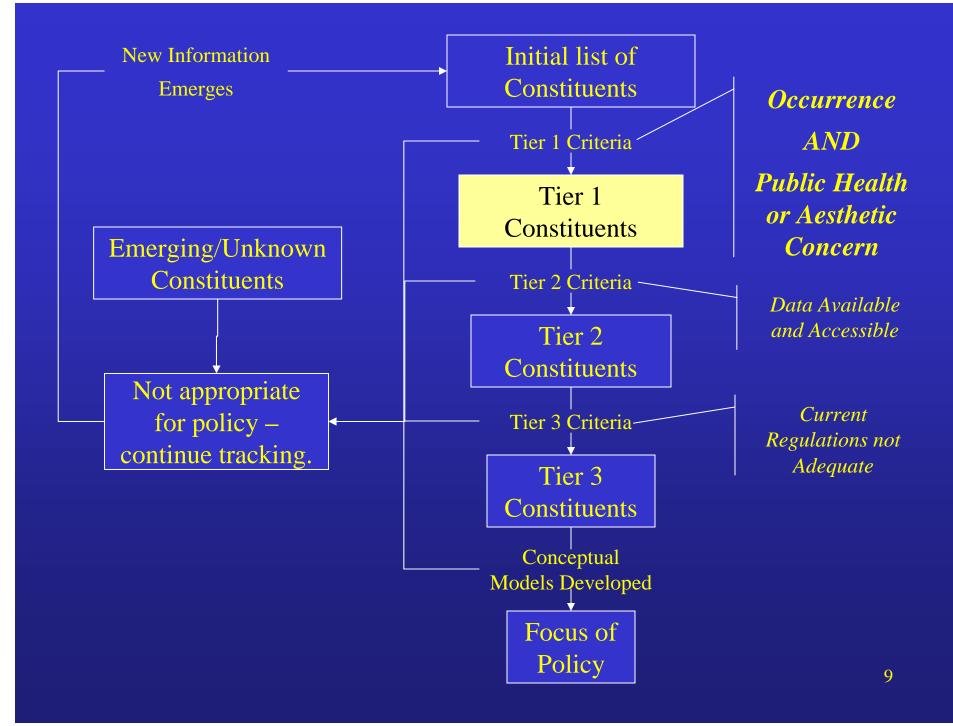
- Nutrients
 - Ammonia
 - Total Nitrogen
 - Total KjehdahlNitrogen
 - Organic Nitrogen
 - Nitrate
 - Nitrite
 - Phosphorus
 - Orthophosphate

- Disinfection Byproducts Precursors
 - Total Organic Carbon
 - Dissolved Organic Carbon
 - Organic Carbon
 - Bromide
 - UVA₂₅₄
 - Specific UVA
 - THMFP
 - Chlorophyll a

Initial List of Constituents (3)

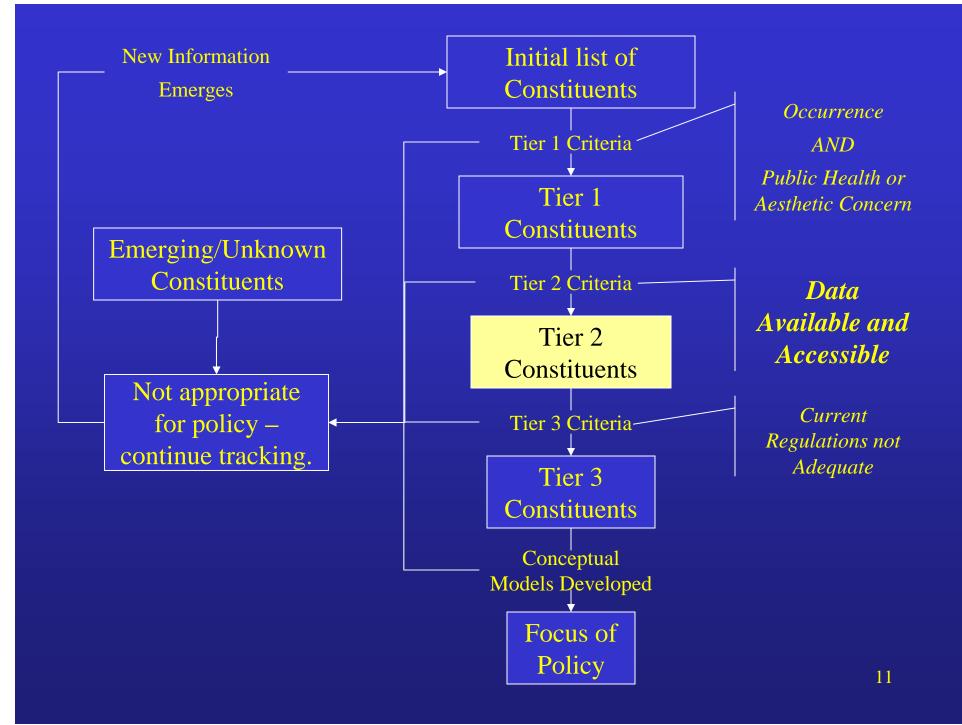
- Pathogens/Indicator Organisms
 - Giardia
 - Cryptosporidium
 - Total Coliform
 - Fecal Coliform
 - Enterococcus
 - E. coli
 - Enterovirus
 - F specific coliphage

- Trace Elements
 - Arsenic
- Hydrology
 - Flow
- Pesticides
 - List of 22 pesticides
 applied to at least 5000
 acres of rice in 2001



Applying Tier 1 Criteria

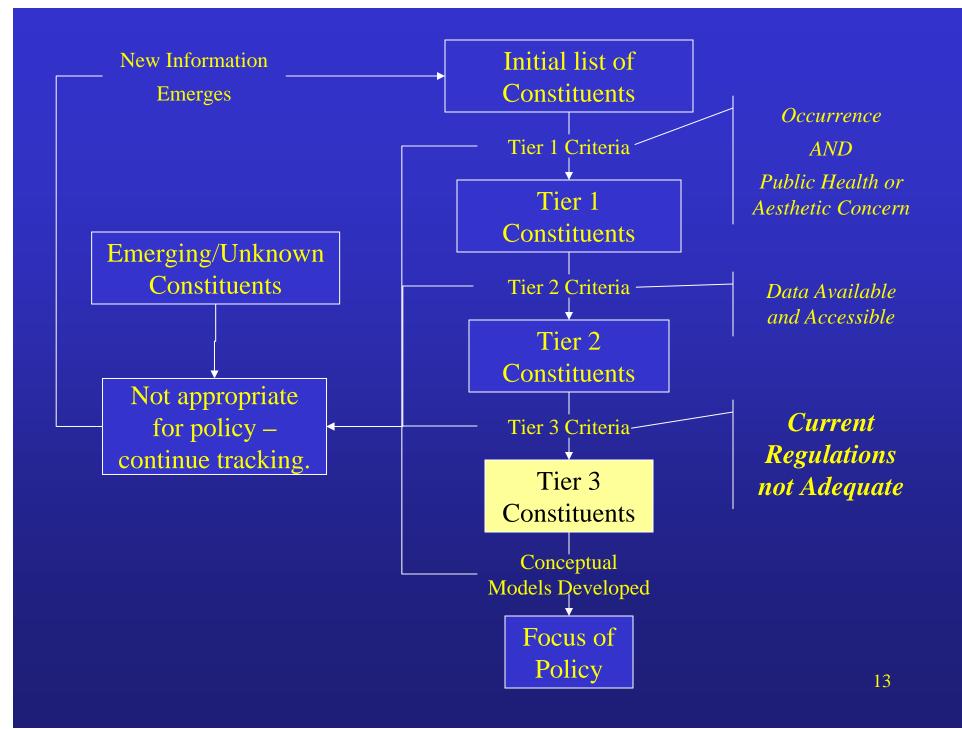
- Cyanide
- Temperature
- DO
- pH
- Hardness
- Percent Sand/Silt/Clay
- Flow
- All pesticides except Molinate and Thiobencarb



Tier 2 List of Constituents

- Turbidity/TSS
- Dissolved Minerals
- Nutrients
- Organic Carbon
- Bromide

- Pathogens & Indicator
 Organisms
- Arsenic
- Molinate
- Thiobencarb

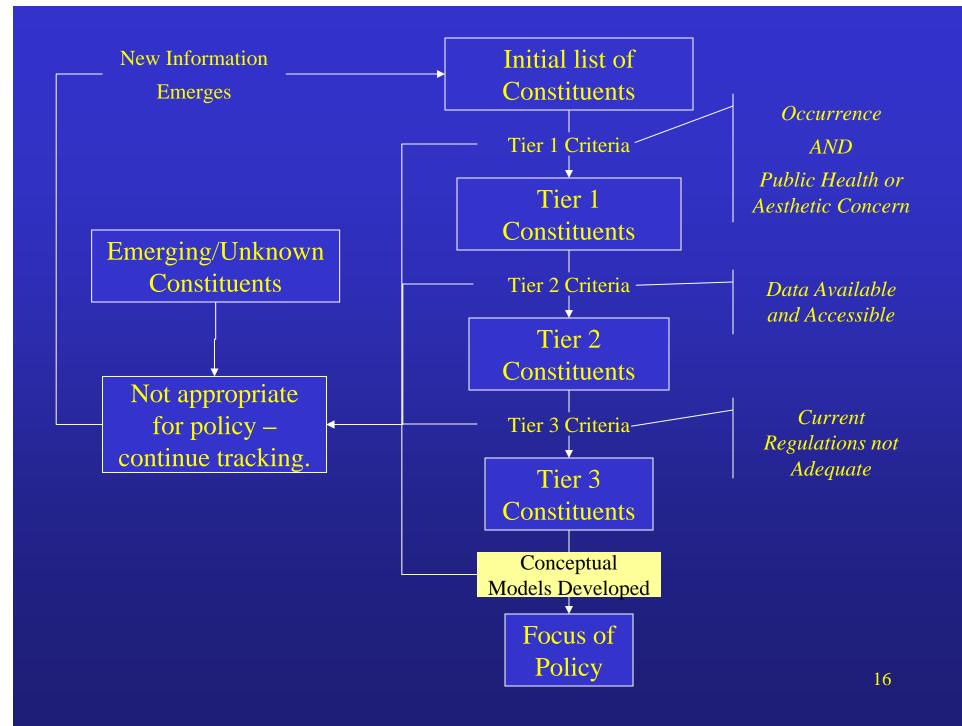


Sufficiently Regulated Constituents

- Turbidity/TSS
- Arsenic
- Molinate
- Thiobencarb

Tier 3 List of Constituents

- Dissolved Minerals
- Nutrients
- Organic Carbon
- Bromide
- Pathogens & Indicator Organisms



Conceptual Modeling

- Compiles existing information
- Describes what is known and not known
- Identifies data gaps and monitoring needs

Current Activities

- TOC workshop held on 1/18
- Additional workshops for remaining constituents planned
- Workshop product is basis for more detailed conceptual modeling